

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicants: Michael Hensel, David William Holden and Jacquelin Shea

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For: *ATTENUATED SALMONELLA SP12 MUTANTS AS ANTIGEN CARRIERS*

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

**INFORMATION DISCLOSURE STATEMENT**

Sir:

Pursuant to 37 C.F.R. §1.56 and 37 C.F.R. §1.97, Applicants submit an Information Disclosure Statement, including fourteen (14) pages of Form PTO-1449. All of the documents cited below were cited by or submitted to the Patent Office in Application Serial No. 09/763,620, filed March 2, 2001, to which the present application claims priority. Pursuant to 37 C.F.R. §1.98(d), Applicants are not enclosing copies of these publications. Copies will be provided upon request, however.

This Information Disclosure Statement is being filed under 37 C.F.R. § 1.97(b) prior to a first Office Action on the merits. It is believed that no fee is required with this submission. However, should a fee be required, the Commissioner is hereby authorized to charge any required fees to Deposit Account No. 50-1868.

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<u>Number</u>	<u>Issue Date</u>	<u>Patentee</u>	<u>Class/Subclass</u>
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**Remarks**

This statement should not be interpreted as a representation that an exhaustive search has been conducted or that no better art exists. Moreover, Applicants invite the Examiner to make an independent evaluation of the cited art to determine its relevance to the subject matter of the present application. Applicants are of the opinion that their claims patentably distinguish over the art referred to herein, either alone or in combination.

Respectfully submitted,



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Dated: January 23, 2004

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			Divisional of 09/763,620		
			Filing Date		
			January 23, 2004		
			First Named Inventor		
Michael Hensel					
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Sheet	1	of	14	Attorney Docket Number	ICI 104 DIV

U.S. PATENT DOCUMENTS						
Examiner Initials*	Cite No. <sup>1</sup>	US Patent Document		Name of Patentee or Applicant of Cited Document	Date of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number	Kind Code <sup>2</sup> (if known)			
/KS/		5,397,697		Lam, et al.	03-14-1995	/
/KS/		5,527,674		Guerra, et al.	06-18-1996	
/KS/		5,618,666		Popoff, et al.	04-08-1997	
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/KS/		6,342,215		Holden, et al.	01-29-2002	

FOREIGN PATENT DOCUMENTS								
Examiner Initials*	Cite No. <sup>1</sup>	Foreign Patent Document			Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T <sup>6</sup>
		Office. <sup>3</sup>	Number <sup>4</sup>	Kind Code <sup>5</sup> (if known)				
/KS/		PCT	WO 92/01056		Institut Pasteur	01-23-1992	/	
/KS/		PCT	WO 93/04202		Washington University	03-04-1993		
/KS/		PCT	WO 94/26933		Leland Stanford Junior University	11-24-1994		
/KS/		PCT	WO 96/17951		RPMS Technologies, Ltd.	06-13-1996		

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		First Named Inventor	Michael Hensele
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/KS/		ADACHI, et al., "Isolation of <i>Dictyostelium Discoideum</i> Cytokinesis Mutants by Restriction Enzyme-Mediated Integration of the Blasticidin S Resistance Marker," <i>Biochem. Biophys. Res. Comm.</i> 205:1808-1814 (1994).	
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/KS/		BROWN et al. (1997) 19th Fungal Genetics Conference, 18-23 March 1997 (Asilomar Conference Centre, Pacific Grove, CA).	

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		First Named Inventor	Michael Hensele
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/KS/Khatol Shahnan Shah/	BROWN, et al., "Molecular analysis of the <i>rtb</i> gene cluster of <i>Salmonella</i> serovar muenchen (strain M67): the genetic basis of the polymorphism between groups 02 and B," <i>Mol. Microbiol.</i> 6:1385-1394 (1992).		
/KS/	CAMILI, et al., "Insertional Mutagenesis of <i>Listeria monocytogenes</i> with a Novel Tn917 Derivative That Allows Direct Cloning of DNA Flanking Transposon Insertions," <i>J. Bacteriol.</i> 172:3738-3744 (1990).		
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/KS/		DUNYAKL, et al., "Identification of <i>Salmonella</i> pathogenicity island 2 (SPI2) genes in <i>Salmonella choleraesuis</i> using signature-tagged mutagenesis," <i>Abstracts of the 97<sup>th</sup> General Meeting of the American Society for Microbiology</i> B-275, May 4-8, 1997.	
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/KS/		GALAN, et al., "Molecular And Functional Characterization Of The Salmonella Invasion Gene invA: Homology Of InvA To Members Of A New Protein Family," (1992).	
/KS/		GenBank Accession No. A51688 " <i>Salmonella typhimurium</i> " (1997).	
/KS/		GenBank Accession No. A51689 " <i>Salmonella typhimurium</i> " (1997)	
/KS/		GenBank Accession No. AF0208080 " <i>Salmonella typhimurium</i> pathogenicity island 2, partial sequence," (1998).	

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/KS/		GenBank Accession No. AJ224892 " <i>Salmonella typhimurium</i> ssaE, ssaA, ssaB, ssaC, ssaD, ssaE, ssaF, ssaG, ssaH, ssaI genes and partial ssaD, ssaJ genes," (1998).	
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/KS/		GROISMAN & OCHMAN, "How To Become A Pathogen," <i>Trends Microbiol.</i> 2:289-293 (1994).	
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/KS/		GUZMAN, et al., "Direct Expression of <i>Bordetella pertussis</i> Filamentous Hemagglutinin in <i>Escherichia coli</i> and <i>Salmonella typhimurium araA</i> ," <i>Inf. Immun.</i> 39:3787-3795 (1991).	
/KS/		GUZMAN, et al., "Expression of <i>Bordetella pertussis</i> filamentous hemagglutinin in <i>Escherichia coli</i> using a two cistron system," <i>Microbiol. Pathogenics</i> 12:383-389 (1992).	

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/KS/		HAN et al. (1997) "Tn5 tagging of the phenol-degrading gene on the chromosome of Pseudomonas putida," <i>Mol. Cells</i> 7:40-44 (1997).	
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/KS/		LEVINE, et al., "Salmonella vaccines" in <i>New Antibacterial Strategies</i> (Neu, HC, ed.), pp. 89-104, (Churchill Livingstone:London, 1990).	
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		Filing Date	January 23, 2004		
		First Named Inventor	Michael Hensele		
		Group Art Unit			
		Examiner Name			
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/KS/	609	LISITSYN, et al., "Cloning The Difference Between Two Complex Genomes," <i>Science</i> 259:946-951 (1993). <del>/Khatol Shahnan Shah/</del>	
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/KS/		MILLER, et al., "Isolation Of Orally Attenuated Salmonella Typhimurium Following TnphoA Mutagenesis," <i>Infection Immun.</i> 57:2758-2763 (1989).	
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/KS/		PIATTI, et al., "Cloning and Characterization of <i>S. typhi</i> ," Societa Italiana di Microbiologia Medica Odontoiatrica e Clinica '93 (Translation), p. 82.	
/KS/		PLUNKETT, EMBL ID NO:EC29479, ACCESSION NO.: U29579 (March 4, 2000).	
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/KS/		RÜSSMAN, et al., "Delivery of epitopes by the <i>Salmonella</i> type III secretion system for vaccine development," <i>Science</i> 281: 565-568 (1998).	
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